January 7, 2004

Mr. Richard Sprott, Director
Division of Air Quality
Utah Department of Environmental Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820

Attention: Nando Meli, Jr., New Source Review Section
RE: Experimental Approval Order: DAQE-AN0327012A-03

Dear Director Sprott,

Experimental Approval Order to Install and Test Over Fire Air: FINAL REPORT

The Intermountain Generating Station (IGS) has installed, tuned, and tested an over fire air system for NOx control under the authority of Approval Order (AO) DAQE-AN0327012A-03 issued by the Division of Air Quality (DAQ). The Intermountain Power Service Corporation (IPSC) is hereby submitting a final report as required in the above referenced AO.

BACKGROUND

On February 5, 2003, IPSC submitted a Notice of Intent requesting approval to install and test an over fire air (OFA) system on Unit 1 for NOx control. Testing results are intended to be used to establish permitting parameters for installing another OFA system on Unit 2 and the full time operation of both systems. The IGS is a coal-fired, steam electric plant located in Millard County.

The OFA was installed and tested to ascertain the operating characteristics and environmental aspects of good combustion practice that minimizes carbon monoxide (CO) emissions while simultaneously controls NOx emissions. Testing results provided a direct correlation to CO emissions from certain OFA operating scenarios. The results of the CO testing helped DAQ and IPSC to develop permit conditions for permanent operation of the OFA system. A report on the CO correlation was submitted September 28, 2003. The experimental approval order also allowed continuous testing to ascertain long term operating anomalies related to changes in coal quality and OFA system stability. Such operational testing occurred through October and part of November, ending November 23, 2003, which was 180 days after the AO issue date. The associated data from that period is included with this submittal.

The DAQ issued an experimental approval order, DAQE-AN0327011-03, on February 14, 2003 granting the installation and testing of OFA. That AO was replaced by DAQE-AN0327012A-03, on May27, 2003 to make certain corrections. The approval order outlines the conditions under which the testing could occur. This letter serves as the final report required by the AO.

TEST SUMMARY & APPROVAL ORDER COMPLIANCE

OFA was installed in the Unit 1 boiler during it's Spring outage. Initial operation of the OFA system upon restart of Unit 1 was problematic in as much as impacts to air flow within the boiler were significantly disrupted. It took significant time and effort to troubleshoot and pinpoint the causes, which included both mechanical breakdown and uneven fuel and air flows.

Once the causes were identified and corrected, tuning the OFA system to operate satisfactorily pursuant to its design began. Once the OFA system performance was optimized, IPSC performed environmental testing to identify specific emission characteristics in various states of operation. That testing occurred September 6 - 9, 2003, and all testing data, along with pre-construct test data, were previously submitted.

At the end of the CO correlation testing, certain expected operating parameters had not been achieved. IPSC continued to work on this problem and perform intermittent OFA test operation throughout the full term of AO DAQE-AN0327012A-03. Data for that operation is being submitted with this report.

The approval order was issued contingent upon compliance with seven conditions to be followed during testing . See page 2 of DAQE-AN0327012A-03. Those conditions and compliance status are outlined below.

1. The test operation of the overfire air (OFA) system was only performed in the Intermountain Generating Station located in Delta, Utah.

2. During the test period the OFA was operated only on the Unit 1 boiler.

3. This Experimental Approval Order replaced the Experimental AO DAQE-AN0327011-03 dated February 14, 2003. (No compliance requirement.)

4. The trial test operations of the OFA will not be performed more than 180 days from the date of this Experimental Approval Order (AO). OFA operation ceased in entirety on November 23, 2003.

5. All requirements of AO DAQE-049092, dated January 11, 2002, and the Title V permit #2700010001 were adhered to during the testing period.

6. The test operation of the OFA system was to be terminated if the emissions and/or opacity limits listed in the AO DAQE-049-02 for the Unit 1 were exceeded. Since such was not the case, OFA testing was not terminated for those reasons.

The seventh requirement was to provide this report, including emissions results covering emissions measured, damper positions, mass airflow, and all other measurements taken that are affected by the OFA system. We have included with this letter an Excel spreadsheet diskette in electronic format containing these required data. The file includes worksheets of various information. Those worksheets are described here:

1. October Operating Data Summary. This worksheet contains all compiled pertinent operating and test data for the testing in October.
2. October Coal Quality. This worksheet provides the analyses for coal burned during October.
3. November Operating Data Summary. This worksheet contains all compiled pertinent operating and test data for the testing in November.
4. November Coal Quality. This worksheet provides the analyses for coal burned during November.
5. Emissions Summary. This worksheet CEMs data compiled during the testing period.

This letter serves to close the conditions of the experimental AO.

If you require any further information concerning the testing of OFA or issues tied to this approval order, please contact Mr. Dennis Killian, Superintendent of Technical Services at IPSC, at 435-864-4414, or dennis-k@ipsc.com .

Cordially,

George W. Cross
President and Chief Operations Officer

BP/RJC/jmg

Enclosures: Data Files
cc: Blaine Ipson
Lynn Banks
Jerry Hintze
Eric Tharp, LADWP